# Workshop Synopsis

# SUBORBITAL SCIENCE MISSIONS OF THE FUTURE

**July 13-15, 2004**
**Tentative Location: Crystal City**
**Sponsored by: NASA Earth Science Enterprise, Suborbital Systems Division**

## GOAL

Develop innovative concepts for Future Suborbital Science Missions in each of six Earth science focus area to guide new investments in suborbital systems development.

## OBJECTIVES

- To define future science investigations in support of ESE scientific objectives for the time frame 2010-2015.
- To derive observation or measurement requirements driving future integrated airborne systems (platform and sensors), such as uninhabited aerial vehicles (UAVs) or other innovative platforms
    - Describe the phenomena to be measured/observed
    - Describe future instrument suites
- The outcomes will be used to identify areas where innovative suborbital capabilities will advance our understanding of the Earth system, as well as helping to define the Suborbital component of the future integrated global observing system, and
- To outline the extent to which future mission requirements can be met using UAV systems; and
- To provide inputs into the development of the National Civil UAV roadmap; and
- To guide the planning and resources of the Suborbital Science Program for the period 2010-2015, answering the questions:
    - Where on the existing roadmaps do these observations fit?
    - What are the relative priorities of the observations?

## PARTICIPATION (by invitation)

- NASA's Earth Science Community, including program managers and scientists from each of the six Earth Science focus area and ESTO.
- Other Government Agencies with suborbital observing needs (DOE, NOAA, etc)
- Universities with Earth science interest
- Other Earth science researchers
- NASA's aeronautical engineering personnel responsible for UAV development

## FORMAT

A two-and-one-half day meeting, including:

- Introductory and plenary sessions
- Facilitated break-out sessions by focus areas
- Summary and prioritization session

## PRODUCT

Workshop report containing narrative descriptions of missions, detailed mission requirements, gap analysis, priorities and recommendations for both individual focus areas and common needs. The outcome will be requirements that guide Suborbital Science and Vehicle System Programs' planning for future technology investments.

CONTACT: Cheryl Yuhas, (202)358-0758, Cheryl.L.Yuhas@nasa.gov